```
=> DISPLAY HISTORY
ENTER (BRIEF), FULL, OR NOFILE:BRIEF
ENTER (L1-), L#, OR ?:l1-L10

     (FILE 'HOME' ENTERED AT 08:08:19 ON 12 JUL 2005)

     FILE 'REGISTRY' ENTERED AT 08:08:31 ON 12 JUL 2005
L1          4681 S TCGA.*CGAACGTTCG/SQSN
L2            38 S L1 AND SQL<=150

     FILE 'USPATFULL, PCTFULL, CAPLUS, BIOSIS, GENBANK' ENTERED AT 08:14:26 ON
     12 JUL 2005
L3          5509 S L1
L4            25 S L2
L5          4975 DUPLICATE REMOVE L3 USPATFULL GENBANK  (534 DUPLICATES REMOVED)
L6          4089 S L5 NOT (HUMAN OR SAPIENS)
L7           123 S L6 AND PATENT/DT

     FILE 'REGISTRY' ENTERED AT 08:37:39 ON 12 JUL 2005
L8             1 S 114654-75-0/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY

=> S L1
L9          4681 TCGA.*CGAACGTTCG/SQSN
```

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1802PXD

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	4	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	5	MAR 02	GBFULL: New full-text patent database on STN
NEWS	6	MAR 03	REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS	7	MAR 03	MEDLINE file segment of TOXCENTER reloaded
NEWS	8	MAR 22	KOREAPAT now updated monthly; patent information enhanced
NEWS	9	MAR 22	Original IDE display format returns to REGISTRY/ZREGISTRY
NEWS	10	MAR 22	PATDPASPC - New patent database available
NEWS	11	MAR 22	REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS	12	APR 04	EPFULL enhanced with additional patent information and new fields
NEWS	13	APR 04	EMBASE - Database reloaded and enhanced
NEWS	14	APR 18	New CAS Information Use Policies available online
NEWS	15	APR 25	Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.
NEWS	16	APR 28	Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus
NEWS	17	MAY 23	GBFULL enhanced with patent drawing images
NEWS	18	MAY 23	REGISTRY has been enhanced with source information from CHEMCATS
NEWS	19	JUN 06	The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available
NEWS	20	JUN 13	RUSSIAPAT: New full-text patent database on STN
NEWS	21	JUN 13	FRFULL enhanced with patent drawing images
NEWS	22	JUN 27	MARPAT displays enhanced with expanded G-group definitions and text labels
NEWS	23	JUL 01	MEDICONF removed from STN
NEWS	24	JUL 07	STN Patent Forums to be held in July 2005

NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:26:46 ON 12 JUL 2005

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:26:55 ON 12 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2005 HIGHEST RN 854584-06-8
DICTIONARY FILE UPDATES: 11 JUL 2005 HIGHEST RN 854584-06-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information.  *
*                                                                    *
**********************************************************************
```

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> S TCGTCGAACGTTCGAGATGAT/SQSN
L1 31 TCGTCGAACGTTCGAGATGAT/SQSN

=> D KWIC SQL 1-31

L1 ANSWER 1 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 2 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =

HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 3 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 4 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 5 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 6 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 7 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 8 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 9 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
       ========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 10 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 11 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 12 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 13 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 14 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 15 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 16 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 17 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 18 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 19 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 20 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 21 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 22 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 23 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

SEQ 1 tcgtcgaacg ttcgagatga t
========== ========== =
HITS AT: 1-21

RELATED SEQUENCES AVAILABLE WITH SEQLINK
SQL 21

L1 ANSWER 24 OF 31 REGISTRY COPYRIGHT 2005 ACS on STN

```
SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21

L1   ANSWER 25 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21

L1   ANSWER 26 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21

L1   ANSWER 27 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21

L1   ANSWER 28 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21

L1   ANSWER 29 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21

L1   ANSWER 30 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
```

```
HITS AT:   1-21
SQL  63,21,21,21

L1   ANSWER 31 OF 31  REGISTRY  COPYRIGHT 2005 ACS on STN

SEQ      1 tcgtcgaacg ttcgagatga t
           ========== ========== =
HITS AT:   1-21

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
SQL  21


=> FILE USPATFULL CAPLUS BIOSIS GENBANK
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     191.47     191.68

FILE 'USPATFULL' ENTERED AT 12:30:03 ON 12 JUL 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 12:30:03 ON 12 JUL 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 12:30:03 ON 12 JUL 2005
Copyright (c) 2005 The Thomson Corporation

FILE 'GENBANK' ENTERED AT 12:30:03 ON 12 JUL 2005

=> S L1
L2          16 L1

=> D L2 BIB AB

L2   ANSWER 1 OF 16  USPATFULL on STN
AN     2004:172513  USPATFULL
TI     Chimeric immunomodulatory compounds and methods of using the same-IV
IN     Fearon, Karen L., Lafayette, CA, UNITED STATES
       Dina, Dino, Oakland, CA, UNITED STATES
       Tuck, Stephen F., Oakland, CA, UNITED STATES
PI     US 2004132677      A1   20040708
AI     US 2003-623371     A1   20030718 (10)
RLI    Continuation-in-part of Ser. No. US 2002-328578, filed on 23 Dec 2002,
       PENDING Continuation-in-part of Ser. No. US 2002-176883, filed on 21 Jun
       2002, PENDING Continuation-in-part of Ser. No. US 2002-177826, filed on
       21 Jun 2002, PENDING
PRAI   US 2001-299883P     20010621 (60)
       US 2002-375253P     20020423 (60)
       US 2002-375253P     20020423 (60)
       US 2001-299883P     20010621 (60)
DT     Utility
FS     APPLICATION
LREP   MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018
CLMN   Number of Claims: 15
ECL    Exemplary Claim: 1
DRWN   21 Drawing Page(s)
LN.CNT 8072
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The invention provides immunomodulatory compounds and methods for
       immunomodulation of individuals using the immunomodulatory compounds.


=> D L2 BIB AB 1-16
```

NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):BIB
NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):AB
NO VALID FORMATS ENTERED FOR FILE 'GENBANK'
In a multifile environment, each file must have at least one valid format requested. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):TI

L2 ANSWER 1 OF 16 USPATFULL on STN
TI Chimeric immunomodulatory compounds and methods of using the same-IV

L2 ANSWER 2 OF 16 USPATFULL on STN
TI Chimeric immunomodulatory compounds and methods of using the same - III

L2 ANSWER 3 OF 16 USPATFULL on STN
TI Chimeric immunomodulatory compounds and methods of using the same - II

L2 ANSWER 4 OF 16 USPATFULL on STN
TI Chimeric immunomodulatory compounds and methods of using the same - I

L2 ANSWER 5 OF 16 USPATFULL on STN
TI Immunomodulatory polynucleotides and methods of using the same

L2 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Synergistic stimulation of the immune system using immunostimulatory oligonucleotides and/or immunomer compounds in conjunction with cytokines and/or chemotherapeutic agents or radiation therapy

L2 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Immunostimulatory oligonucleotides, sequences, and methods of using the same

L2 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chimeric immunomodulatory compounds and methods of using the same

L2 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Particulate immunostimulant

L2 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI IL-10 regulates plasmacytoid dendritic cell response to CpG-containing immunostimulatory sequences

L2 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chimeric immunomodulatory compounds comprising two or more nucleic acid moieties and non-nucleic acid spacer

L2 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Rational design of new CpG oligonucleotides that combine B cell activation with high IFN-α induction in plasmacytoid dendritic cells

L2 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Identification of a novel CpG DNA class and motif that optimally stimulate B cell and plasmacytoid dendritic cell functions

L2 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Chimeric immunomodulatory compounds comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer

L2 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
TI Immunomodulatory oligonucleotides containing immunostimulatory sequences for treatment of disorders associated with a Th2-type immune response

L2 ANSWER 16 OF 16 GENBANK® COPYRIGHT 2005 on STN

TITLE (TI): Immunomodulatory polynucleotides and methods of using the same

=> D BIB AB 6

L2 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:99311 CAPLUS
DN 142:191248
TI Synergistic stimulation of the immune system using immunostimulatory oligonucleotides and/or immunomer compounds in conjunction with cytokines and/or chemotherapeutic agents or radiation therapy
IN Kandimalla, Ekambar R.; Agrawal, Sudhir
PA Hybridon, Inc., USA
SO PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005009355	A2	20050203	WO 2004-US22797	20040715
WO 2005009355	A3	20050331		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-487529P	P	20030715	
US 2003-503242P	P	20030915	

AB The invention provides optimized methods and compns. for enhancing the immune response caused by immunostimulatory compds. used for the treatment of disease such as, but not limited to, treatment of cancer, autoimmune disorders, asthma, respiratory allergies, food allergies and infectious diseases in a patient. The optimized methods according to the invention provide synergy between the therapeutic effects of immunostimulatory oligonucleotides and immunomer compds. in accordance with the invention, and the therapeutic effect of cytokine immunotherapy and/or chemotherapeutic agents and/or radiation.

=> D BIB AB 7

L2 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:566552 CAPLUS
DN 141:99693
TI Immunostimulatory oligonucleotides, sequences, and methods of using the same

IN Dina, Dino; Fearon, Karen L.; Marshall, Jason
PA Dynavax Technologies, USA
SO PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004058179	A2	20040715	WO 2003-US41001	20031218
	WO 2004058179	A3	20041111		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI	US 2002-436122P	P	20021223
	US 2003-447885P	P	20030213
	US 2003-467546P	P	20030501

AB The invention provides immunomodulatory polynucleotides (IMPs) and methods for immunomodulation of individuals using the immunomodulatory polynucleotides. In accordance with the present invention, the IMP contains at least one palindromic sequence of at least 8 bases in length containing at least one CG dinucleotide. The IMP also contains at least one TCG trinucleotide sequence at or near the 5'-end of the polynucleotide. In some instances, the palindromic sequence and the 5'-TCG are separated by 0, 1, 2, 3, 4 or 5 bases in the IMP. In some instances the palindromic sequence includes all or part of the 5'-TCG. Claimed is an immunomodulatory polynucleotide, comprising: (a) 5'-Nx(TCG(Nq))yNw(X1X2CGX2'X1'(CG)p)z (SEQ ID NO: 156) wherein N are nucleosides, x = 0-3, yr = 1-4, w = -2, -1, 0, 1 or 2, p = 0 or 1, q = 0, 1 or 2, and z = 1-20, X1 and X1', X2 and X2' are self-complimentary nucleosides, and wherein the 5' T of the (TCG(Nq))y sequence is 0-3 bases from the 5' end of the polynucleotide; and (b) a palindromic sequence at least 8 bases in length wherein the palindromic sequence comprises the first (X1X2CGX2'X,') of the (X1X2CGX2'X1'(CG)p)z sequences.

=> D BIB AB 9

L2 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:142919 CAPLUS
DN 140:198064
TI Particulate immunostimulant
IN Van Nest, Gary; Tuck, Stephen
PA Dynavax Technologies Corporation, USA
SO PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004014322	A2	20040219	WO 2003-US25415	20030812
	WO 2004014322	A3	20040708		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,

TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2494911 AA 20040219 CA 2003-2494911 20030812
PRAI US 2002-402968P P 20020812
WO 2003-US25415 W 20030812

AB The authors disclose immunomodulatory compns. which comprise a cationic condensing agent, an immunomodulatory compound, and a stabilizing agent. The compns. of the invention typically form particles which have increased immunomodulatory activity as compared to immunomodulatory compds. not formulated in the compns. of the invention. Also provided are methods of making the compns. and methods for therapeutic use of the compns. In one example, interferon-γ release by human mononuclear cells was shown to be enhanced by the combination of CpG oligonucleotide, polymyxin B, and Tween-80.

=> D BIB AB 10

L2 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:975836 CAPLUS
DN 140:75912
TI IL-10 regulates plasmacytoid dendritic cell response to CpG-containing immunostimulatory sequences
AU Duramad, Omar; Fearon, Karen L.; Chan, Jean H.; Kanzler, Holger; Marshall, Jason D.; Coffman, Robert L.; Barrat, Franck J.
CS Dynavax Technologies Corporation, Berkeley, CA, USA
SO Blood (2003), 102(13), 4487-4492
CODEN: BLOOAW; ISSN: 0006-4971
PB American Society of Hematology
DT Journal
LA English
AB Immunostimulatory sequences (ISS) are short oligonucleotides containing unmethylated cytosine-phosphate-guanine (CpG) dinucleotides that stimulate innate immune responses through Toll-like receptor-9 on B cells and plasmacytoid dendritic cell (PDC) precursors. The anti-inflammatory cytokine interleukin (IL)-10 is predicted to be a potent inhibitor of many of the activities described for ISS, and this may impact the use of ISS in disease states characterized by elevated IL-10. As the activities of ISS on PDCs are central to many clin. applications of ISS, we have studied the effects of IL-10 on PDC stimulation by 3 distinct classes of ISS. IL-10 inhibited cytokine production and survival of ISS-activated PDCs; however, IL-12 induction was much more sensitive to inhibition than interferon (IFN)-α induction. Within the PDC population are cells that respond to ISS by producing either IL-12 or IFN-α but not both cytokines. IL-12-producing PDCs require costimulation through CD40 and appear more mature than IFN-α-producing PDCs. The 3 distinct classes of ISS differed with respect to induction of PDC maturation and T-cell priming capacity. IL-10 regulated PDC activation but did not inhibit the subsequent T-cell-priming ability of PDCs already activated by ISS.
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D BIB AB 11

L2 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:950038 CAPLUS
DN 140:26897
TI Chimeric immunomodulatory compounds comprising two or more nucleic acid moieties and non-nucleic acid spacer
IN Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.
PA USA

SO U.S. Pat. Appl. Publ., 96 pp., Cont.-in-part of U.S. Ser. No. 176,883.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003225016	A1	20031204	US 2002-328578	20021223
	US 2003175731	A1	20030918	US 2002-176883	20020621
	US 2003199466	A1	20031023	US 2002-177826	20020621
	US 2004132677	A1	20040708	US 2003-623371	20030718
PRAI	US 2001-299883P	P	20010621		
	US 2002-375253P	P	20020423		
	US 2002-176883	A2	20020621		
	US 2002-177826	A2	20020621		
	US 2002-328578	A2	20021223		

AB The invention provides immunomodulatory compds. and methods for immunomodulation of individuals using the immunomodulatory compds. The immunomodulatory compds. comprise two or more nucleic acid moieties and a non-nucleic acid spacer moiety. The nucleic acid contains e.g. 5'-CG-3', 5'-TCG-3', 5'-TCGA-3', 5'-TCGACGT-3', or 5'-TCGACGA-3'; and the non-nucleic acid is an oligoethylene glycol such as hexaethylene glycol. The chimeric compds. are incorporated into endotoxin-free compns. comprising antigen, pharmaceutically acceptable excipient, and optionally a cationic microsphere for modulating immune response.

=> D BIB AB 12

L2 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:499872 CAPLUS
DN 139:99590
TI Rational design of new CpG oligonucleotides that combine B cell activation with high IFN-α induction in plasmacytoid dendritic cells
AU Hartmann, Gunther; Battiany, Julia; Poeck, Hendrik; Wagner, Moritz; Kerkmann, Miren; Lubenow, Norbert; Rothenfusser, Simon; Endres, Stefan
CS Department of Internal Medicine, Division of Clinical Pharmacology, Ludwig-Maximilians-University of Munich, Munich, Germany
SO European Journal of Immunology (2003), 33(6), 1633-1641
CODEN: EJIMAF; ISSN: 0014-2980
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
AB Two different types of CpG motif-containing oligonucleotides (CpG ODN) have been described: CpG-A with high induction of IFN-α in plasmacytoid dendritic cells; and CpG-B with little induction of IFN-α, but potent activation of B cells. In this study, we demonstrate that CpG-A fail to activate B cells unless plasmacytoid dendritic cells are present. We identified a new set of CpG ODN sequences which induces high levels of IFN-α in plasmacytoid dendritic cells but remains capable of directly activating B cells. These new CpG ODN (termed CpG-C) are more potent stimulants of B cells than CpG-B due to their ability of directly and indirectly (via plasmacytoid dendritic cells) activating B cells. The sequence of CpG-C combines structural elements of both CpG-A and CpG-B. The most potent sequence, M362, contains a 5'-end "TCGTCG-motif" and a "GTCGTT-motif", both of which are present in CpG-B (ODN 2006); a palindromic sequence characteristic for CpG-A (ODN 2216); but no poly G motif required for CpG-A. In conclusion, we defined the first CpG-containing sequences that potently activate both TLR9-expressing immune cell subsets in humans, the plasmacytoid dendritic cell and the B cell. CpG-C may allow for improved therapeutic immuno-modulation in vivo.
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D BIB AB 14

L2 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2003:6160 CAPLUS
DN 138:88635
TI Chimeric immunomodulatory compounds comprising nucleic acids linked through dendrimer or polysaccharide spacer and antigen for treating allergy, infection or cancer
IN Fearon, Karen L.; Dina, Dino; Tuck, Stephen F.
PA Dynavax Technologies Corporation, USA
SO PCT Int. Appl., 224 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003000922	A2	20030103	WO 2002-US20025	20020621
	WO 2003000922	A3	20031023		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2451974	AA	20030103	CA 2002-2451974	20020621
	EP 1404873	A2	20040407	EP 2002-744589	20020621
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004537535	T2	20041216	JP 2003-507303	20020621
PRAI	US 2001-299883P	P	20010621		
	US 2002-375253P	P	20020423		
	WO 2002-US20025	W	20020621		

AB The invention provides immunomodulatory compds. (CIC) and methods for immunomodulation of individuals using the immunomodulatory compds. The CIC comprises one or more nucleic acid moieties and one or more non-nucleic acid moieties such as dendrimer, polysaccharide, and crosslinked polysaccharide through phosphodiester, phosphorothioate ester, phosphorodithioate ester, and other linkages. The CIC is capable of stimulating production of interferon γ and α by human peripheral blood mononuclear cells, as well as human B cell proliferation. Endotoxin-free compns. comprising the CIC covalently or non-covalently conjugated with antigen and cationic microsphere are useful for treating disorders associated with IgE or Th2-type immune response such as allergy, asthma, infection, viral infection, idiopathic pulmonary fibrosis, and cancer.

=> DISPLAY HISTORY L1-L3
ENTER (BRIEF), FULL, OR NOFILE:BRIEF

(FILE 'HOME' ENTERED AT 12:26:46 ON 12 JUL 2005)

FILE 'REGISTRY' ENTERED AT 12:26:55 ON 12 JUL 2005
L1 31 S TCGTCGAACGTTCGAGATGAT/SQSN

FILE 'USPATFULL, CAPLUS, BIOSIS, GENBANK' ENTERED AT 12:30:03 ON 12 JUL 2005
L2 16 S L1

=> LOGOFF Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	33.17	224.85

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.11	-5.11

STN INTERNATIONAL LOGOFF AT 12:35:48 ON 12 JUL 2005